REMARKS

This is intended as a full and complete response to the Office Action dated October 20, 2005. In view of the amendments and the following discussion, the Applicants believe that all claims are in allowable form.

CLAIM REJECTIONS

35 U.S.C. §102(b) Claims 1, 2, 4, 6, 7, 10-14, 16, 17, 20-22 and 26-28

Claims 1, 2, 4, 6, 7, 10-14, 16, 17, 20-22 and 26-28 stand rejected as being unpatentable over United States Patent No. 5,755,888 issued May 26, 1998 to *Torii, et al.* (hereinafter referred to as *"Torii"*). In response, the Applicants have amended independent claims 1 and 21 to more clearly recite aspects of the invention. With respect to independent claim 12, the Applicants respectfully disagree.

Independent claims 1 and 21, as amended, and claim 12 recite limitations not taught or suggested by *Torii*. *Torii* teaches connecting two different process chambers, *e.g.*, a PVD chamber and a MOCVD chamber, though a connecting part 10 and an exhaust means 5, wherein the exhaust means can be controlled by an exhaust switch to keep the exhaust means in communication with only one selected chamber at one time. In other words, *Torii* teaches separate chamber bodies for each processing region. *Torii* does not teach or suggest a tandem vacuum processing chamber having a chamber body defining first and second processing regions and having an interior sidewall configured to separate the first processing region from the second processing region, as recited by claim 1. Furthermore, *Torii* does not teach or suggest a tandem processing chamber having a first annular processing region and a second annular processing region, as cited in claim 12; or a processing chamber having a chamber body having a first gas distribution assembly defining an upper boundary of a first annular processing region, and a second gas distribution assembly defining an upper boundary of a second annular processing region, as recited in claim 21.

Therefore, the Applicants submit that independent claims 1, 12 and 21, and all claims depending therefrom, are patentable over *Torii*. Accordingly, the Applicants respectfully request the rejection be withdrawn and the claims allowed.

35 U.S.C. §102(e) Claims 1, 8 and 21

Claims 1, 8 and 21 stand rejected as being unpatentable over United State Patent Publication 2002/0195056, published to *Sandhu et al.* (hereinafter referred to as "*Sandhu*"). In response, the Applicants have amended independent claims 1 and 21 to more clearly recite aspects of the invention. Claim 1, as amended, now incorporates the limitations of claim 8. Claim 8 has been cancelled without prejudice.

Independent claims 1 and 21 recite limitations not taught or suggested by *Sandhu*. *Sandhu* teaches a reactor chamber having multiple deposition regions to deposit individual monolayer on a substrate in each deposition region. The substrate is being transferred between the adjacent paired process regions though an openable door 174 disposed therebetween (*Sandhu*, Paragraph 53, Lines 4-9, Figure 7). The door disposed therebetween is a gas curtain which can be opened and closed while moving the substrate therethrough in a predetermined sequence. In short, the apparatus taught in *Sandhu* includes at least three transfer ports, *e.g.*, two ports formed in each of the process region and an openable door disposed therebetween, to transfer and move in and out the substrate. In contrast, *Sandhu* does teach or suggest a tandem vacuum processing chamber having a chamber body defining first and second process regions and each of the processing region has a single substrate transfer port formed through an outer sidewall of the chamber, and further comprising an interior wall positioned between the first and second processing region, as recited by claim 1. Furthermore, *Sandhu* does not teach or suggest a tandem vacuum processing chamber having a first and a second process region and a single substrate transfer port formed in each of the processing region through an outer sidewall of the chamber body, as recited in claim 21.

Therefore, the Applicants submit that independent claims 1 and 21 are patentable over *Sandhu*. Accordingly, the Applicants respectfully request the rejection be withdrawn and the claims allowed.

NEW CLAIMS

The Applicants have added new claims 29-31. The Applicants believe that the new claims are fully supported by the specification and are patentable over the references of record because the prior art does not teach or suggest a tandem vacuum processing chamber having a first and a second gas distribution assembly that share a common gas source. Thus, the Applicants submit that no new matter has been added and respectfully request allowance of these claims.

CONCLUSION

Applicants submit that all claims are in condition for allowance. Accordingly, the Applicants respectfully request reconsideration of this application and its early allowance.

If the Examiner believes that any unresolved issues still exist, it is requested that the Examiner telephone Mr. Keith Taboada at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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